

**IN THE DRAWINGS**

The attached two sheet of drawings, which include Figs. 13 and 14, replaces the original sheet including Figs. 13 and 14. Figs. 13 and 14 have each been amended to place a "Prior Art" legend therein. No new matter has been added.

Attachment : Two Replacement Sheets

**REMARKS**

Applicant would like to express appreciation to the Examiner for the detailed Official Action provided and for the acknowledgment of Applicant's Information Disclosure Statements (IDS) by return of the Forms PTO-1449. Upon entry of the present paper, Figs. 13 and 14, the Abstract, and claims 7, 11, 15, 17 and 20 will have been amended, and claims 7-9, 11, 13, 15, 17 and 20 will remain pending before the Examiner. Applicant respectfully requests reconsideration and withdrawal of the outstanding objections and rejections. Such action is respectfully requested and is now believed to be appropriate. Applicant further gratefully acknowledges the Examiner's indication of the allowability of claim 9.

The Examiner has objected to the drawings, requiring that a Prior Art legend be inserted in Figs. 13 and 14. By the present amendment, Applicant has included such a Prior Art legend in these two figures. No new matter has been added. Applicant thus respectfully requests withdrawal of this objection to the drawings.

The Examiner has objected to the Abstract, requesting, *inter alia*, submission of an Abstract of only a single paragraph. In compliance with the Examiner's request, Applicant has submitted a new abstract, and requests withdrawal of this objection.

The Examiner has objected to claims 7-9, 11, 13, 15 17 and 20 because of various informalities. Without agreeing to the propriety of the Examiner's objection and solely to expedite the patent examination process, Applicant has cosmetically amended claims 7, 11, 15, 17 and 20 where appropriate. With respect to the Examiner's objection to claim 13, Applicant has not included a definition of W-CDMA, since those of skill in the art readily understand this acronym to mean "Wideband Code Division Multiple Access." It is thus respectfully requested that the Examiner withdraw the aforementioned objections.

The Examiner has rejected 7-8, 11, 13, 15, 17 and 20 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,774,494 to SAWAHASHI. For example, the Examiner asserts that the frequency drift correction portion 25 (*see* Fig. 2) of SAWAHASHI corresponds to the claimed adder, noting that since the frequency drift correction portion 25 (*i.e.*, multiplier), which is equivalent to the multitude of an adding function, adds  $S_{31}$ ,  $S_{3Q}$ ,  $S_{71}$ ,  $S_{7Q}$ ,  $S_{81}$  and  $S_{8Q}$ . Further, the Examiner asserts that one skilled in the art would recognize that multitude or an adding function is equivalent to a multiplying function, and further noting that “although the difference between the claimed invention and the teaching of SAWAHASHI is that the reference signals are added prior to presenting to the correlator, while SAWAHASHI teaches performing correlations based on the reference signals and adding the output of the correlators,” and concludes that it would have been obvious to modify SAWAHASHI to add the reference signals prior to correlation.

Applicant respectfully traverses the Examiner's rejection, and notes that, with respect to independent claim 7, SAWAHASHI fails to disclose at least the claimed adder for receiving  $n$  reference signals  $R1(t)$ - $Rn(t)$  and a single said reference signal  $R0(t)$  as a base and adding them together to output a corrected reference signal  $R(t)$ . Contrary to the Examiner's assertion, the frequency drift correction portion 25 of SAWAHASHI does not correspond to the claimed adder. Rather, the frequency drift correction portion 25 of SAWAHASHI multiplies  $S_{31}$  and  $S_{3Q}$ , which are outputted from a correlation detector 17 by  $S_{41}$  and  $S_{4Q}$ , which are the average of  $S_{161}$  and  $S_{16Q}$ . As described, *inter alia*, in col. 6, lines 30-49 of SAWAHASHI,  $S_{161}$  and  $S_{16Q}$  are frequency drifts, which are outputted from a correlation output error/frequency drift converter 58. The correlation output error/frequency drift converter 58 outputs the frequency drifts  $S_{161}$  and  $S_{16Q}$ , which correspond to  $S_{15}$ . Applicant notes that  $S_{15}$  is not a sum of  $S_{71}$ ,  $S_{7Q}$ ,  $S_{81}$  and  $S_{8Q}$ , but rather is obtained from  $S_{71}$ ,  $S_{7Q}$ ,  $S_{81}$  and  $S_{8Q}$ , since refs 51-56 must also be processed (*i.e.*, refs 51-56 cannot be ignored).

Therefore, if one of ordinary skill in the art would modify SAWAHASHI by replacing the frequency drift correction portion 25 (*i.e.*, the multiplier) with the claimed adder, the adder would not add  $S_{31}$ ,  $S_{3Q}$ ,  $S_{71}$ ,  $S_{7Q}$ ,  $S_{81}$  and  $S_{8Q}$ , but rather would add  $S_{31}$  and  $S_{3Q}$  and the averaged frequency drifts, thereby rendering the combination *ineffective*. Nevertheless, Applicant submits that one of ordinary skill in the art would not replace the frequency drift correction portion 25 with the claimed adder. The frequencies of  $S_{31}$  and  $S_{3Q}$  should be converted so that the frequency drift is corrected. Using the multiplier (*e.g.*, an up-converter and a down-converter) for converting frequency is well-known in the art; however, frequency converting cannot be performed by adding  $S_{31}$  and  $S_{3Q}$  and the added frequency drifts.

Applicant further notes that at least the Examiner's assertion (on pages 4-5 of the Official Action) that one skilled in the art would have expected the invention to perform equally well with performing correlations based on the reference signals and adding the output of the correlators because the result would be equivalent, is entirely without support. Applicant respectfully requests that the Examiner provide support for such an assertion by providing, *e.g.*, a reference, should the Examiner maintain such rejection.

It is thus clear that in the rejection under §103, the Examiner has, based upon Applicant's own disclosure, picked various individual features of the applied document (together with some feature of which are not present in the document) and has combined them in the manner taught only by Applicant's own disclosure. This hindsight reconstruction of the prior art to arrive at Applicant's claimed invention is inappropriate under 35 U.S.C. § 103. The Examiner has thus failed to identify the reason why a person of ordinary skill in the art would have combined the prior art elements in the manner claimed.

With respect to the Examiner's rejection of dependent claims 8 , 11 and 13, Applicant

submits that these claims are dependent from allowable independent claim 7, which is allowable for at least the reasons discussed *supra*. Thus, these dependent claims are also allowable for at least the reasons discussed *supra*. Further, all dependent claims set forth a further combination of elements neither taught nor disclosed by any of the references of record.

With respect to the Examiner's rejection of independent claims 15, 17 and 20, Applicant respectfully submits that none of the references of record discloses at least: an adding step for receiving  $n$  reference signals  $R1(t)$ - $Rn(t)$  and a single said reference signal  $R0(t)$  as a base and adding them together to output a corrected reference signal  $R(t)$ , as claimed in claims 15 and 17; and an adder that receives  $n$  reference signals  $R1(t)$ - $Rn(t)$  and a single said reference signal  $R0(t)$  as a base and adds them together to output a corrected reference signal  $R(t)$ , as claimed in claim 20, for at least the reasons discussed *supra*, and respectfully requests withdrawal of the rejection of these claims. Further, these claims set forth a further combination of elements neither taught nor disclosed by any of the references of record.

It is therefore submitted that the Examiner's determination of obviousness rests on mere conclusory statements, without any reasoning with some rational underpinning to support the Examiner's determination of obviousness. Thus, Applicant submits that the references of record fail to disclose, alone or in any proper combination, the present claimed invention.

Thus, Applicant respectfully submits that each and every pending claim of the present application meets the requirements for patentability at least under 35 U.S.C. § 103, and respectfully requests the Examiner to indicate the allowance of each and every pending claim in the present application.

COMMENTS ON STATEMENT OF REASONS FOR THE INDICATION OF ALLOWABLE  
SUBJECT MATTER

In response to the Statement of Reasons for the Indication of Allowable Subject Matter, mailed by the U.S. Patent and Trademark Office on January 24, 2007, along with the above-noted Official Action, Applicant wishes to clarify the record with respect to the basis for patentability of the allowed claims in the present application. In this regard, while Applicant does not disagree with the Examiner's indications that certain identified features are not disclosed by the prior art references, as noted by the Examiner, Applicant further wishes to clarify that each of the independent claims in the present application recites a particular combination of features, and the basis for patentability of each of these claims is further based on the particular totality of the features recited therein. The dependent claims set forth additional basis for their patentability in accordance with their recited limitations as well as in accordance with the particular limitations of the respective base claims.

SUMMARY AND CONCLUSION

In view of the fact that none of the art of record, whether considered alone, or in any proper combination thereof, discloses or suggests the present invention, reconsideration of the Examiner's action and allowance of the present application are respectfully requested and are believed to be appropriate.

Applicant notes that the amendments to the claims are to be considered merely clarifying amendments that are cosmetic in nature, and are not intended to narrow the scope of the claims. Accordingly, this Amendment should not be considered a decision by Applicant to narrow the claims in any way.

Should there be any questions, the Examiner is invited to contact the undersigned at the below-listed telephone number.

Respectfully Submitted,  
Masahiko MUTOH

A handwritten signature in black ink, appearing to read "Will Boshnick", written over a horizontal line.

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